

United States Environmental Protection Agency Region 4





35TH AVENUE REMOVAL INVESTIGATION BIRMINGHAM, ALABAMA JEFF CROWLEY, ON-SCENE COORDINATOR

FIELD SAMPLING LOGBOOK

Book of

| Inclusive Dates: | Team in logbook: |
|------------------|---------------------------|
| Name | cials Organization/Duties |
| (h) (c) | |
| (b) (6) | OTIE |
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Sampling Procedures and Methodology

Unless specified elsewhere in this logbook, all soil samples will be collected in accordance with the EPA Science and Ecosystem Division (SESD) Field Branches Quality System and Technical Procedures (FBQSTP) Soil Sampling (SESDPROC-300-R2) based on the following design.

The total number of 5-point composite surface soil samples (0-4 inches below ground surface) to be collected from each property will be based on the lot size as follows:

- For residential properties with a total parcel lot size equal to or less than (≤) 5,000 square feet the front yard and back yards of each property. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may also be collected from the side yard. Aliquots will be collected away from influences with drip lines and burn areas in a five dice configuration (each of the four corners and the center).
- For residential properties with a total parcel lot size greater than (>) 5,000 square feet and ≤ ¼-acre the property should be divided into two roughly equal surface areas. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may be collected from the side yard with the remainder of the property being divided into two roughly equal surface areas. Aliquots will be collected away from influences including drip lines and burn areas with reasonably equal spacing between aliquots.
- Residential properties over ¼-acre in parcel lot size will be divided into ¼-acre sections. When dividing any such property with a substantial side yard (primarily corner lots), one composite soil sample may be collected from the side yard. Aliquots will be collected away from influences including drip lines and burn areas in a five dice configuration, if possible, with reasonably equal spacing between aliquots.

Grab surface soil samples will be collected from apparent exposure pathways where active play sets are located.

Three-point composite surface soil samples will be collected from distinct vegetable gardens from each residential property.

Samples shall not be collected under paved areas or under stationary fixed structures.

Grab sediment samples will be collected in accordance with EPA SESD FBSTP Sediment Sampling (SESDPROC-200-R2) from any surface water drainage pathways located on individual properties, as directed by the OSC, and in and along the banks of the 34th Street North Ditch.

Each surface soil or sediment sample should be homogenized in a stainless steel bowl. One 8-ounce jar will be filled and the remaining sample material will be placed in zip-top bags for screening. Information identifying the location, sample, and date/time will be inscribed on each jar and zip-top bag.

All sample bags will be screened for metals in accordance with SESD FBQSTP Field XRF Measurement (SESDPROC-107-R2) using a Niton XRF. The sample will be dried before sieving or analysis is performed. Once the sample has dried, the sample will be divided into two subsamples; one subsample will be sieved through a #10 screen (2 mm) and the other will be left unsieved. Once separated into sieved and unsieved samples, the zip-top bag will be compressed by folding over the excess plastic and removing as much air and space from the sample as possible. The XRF will be placed directly on the exterior of the compressed sample in the plastic zip-top bag to measure metals concentrations. Following XRF screening, the unsieved portion of the sample material will be containerized into one 8-ounce jars and the sieved portion of the sample will be containerized into another 8-ounce jar.

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Start Time air samples

8 7924 on metals at 3469 + 3471 33rd St. North
mercury
AAHs

Stop time at 1326

Data RAM (004672)

Start time = 1002 > 3469 + 3471 335d St. North

Stop time = 1144

Start time = 1244 - 3223 32nd Place North

Stop time = 1325

Based on the site DQOs the 8-ounce jars of surface soil and sediment samples should be submitted to PEL, Tampa, Florida (a NELAC certified laboratory) for low level PAH, and/or TCL SVOC, RCRA metals, PCB, and/or Hexavalent Chromium analysis. RCRA metals will be analyzed from both the sieved and unsieved portions of the sample. All other analysis will be conducted on the unsieved portion.

The location of each aliquot will also be logged in accordance with SESD FBQSTP Global Positioning System (SESDPROC- 110-R3) using a Trimble GPS.

A description of the color and texture of the aliquot material will be recorded in each box.

The *station ID* for each location will consist of seven characters, beginning with the six digit Property ID designation for the property followed by a alphabetic letter beginning with "A".

e.g. CV0001A would be the station ID for the front yard 5-pt composite sample collected at the property with Property ID CV0001.

The *sample ID* for each sample is the station ID with "CS" (composite soil), "GS" (grab soil), "SD" (sediment), or "SW" (surface water) appended, therefore, the sample ID for this sample would be CV0001A-CS. Co-located duplicates will be designated by appending a "D" to the end of the sample ID. Pan splits will be identified by appending an "SP" to the end of the sample ID.

| ADDRESS: (b) (6) PROPERTY ID: CV0494 |
|--|
| DATE: 11/08/12 ARRIVAL TIME: 0923 |
| Other pertinent information (weather conditions, etc.): |
| PROPERTY COMMENTS: |
| Two dwellings on this property. |
| |
| |
| |
| |
| |
| Grid for property sketch |
| # Back 2 |
| |
| 14 White block 2 |
| 1 house |
| to the second se |
| |
| |
| Brown brick House |
| House 5 |
| |
| 26 + 13 2 26 + 1 |
| 3 23' Front 2x 1 0 |
| 34' 6Fa55 0242.5' |
| 1 2 × × × × × × × × × × × × × × × × × × |
| (1-) (0) |
| (b) (6) Dataram |
| Distances |
| Front > Point # 1 to 2 is 23' Point #4 is Furthest |
| 2 to 3 is 34' from house at 27' 3 to 4 is 42.5' |
| 4 +0 5 15 26 |
| DU - D. Let 11 L C: 11C1 Point #5 is furthest |
| 3 to 5 is 32' tran house at 01 |
| 3 to 2 is 23' |
| 2 to 2 is 23' |

| STATION ID: CV0494 A | SAMPLE ID: CV 0494 A-CS |
|---|--|
| SAMPLE COLLECTION TIME: 1105 | |
| Description of sample location (front, back, side yard; | vegetable garden; play set; ditch, etc): |
| Collection: Composite or Grab | MS/MSD? Y or N |
| Field Duplicate or Split: Yes or No If yes, indicate Dupl | |
| GPS Coordinates: Trimble [Instrument #: | Logged? Y or N |
| Aliquot #1: Latitude: 33.56036267 | N Longitude 86.8024062-5 W |
| Media description: | |
| Aliquot #2 Latitude: 33, 56033370 | N Longitude 86.80247838 W |
| Media description: | |
| Aliquot #3: Latitude: 33. 560 26257 | N Longitude 86.80243073 W |
| Media description: | |
| Aliquot #4: Latitude: 33, 56014536 | N Longitude 86.802-39503 W |
| Media description: | |
| Aliquot #5: Latitude: 33, 5602005 | N Longitude 86.80234885 W |
| | |
| Media description: | |
| STATION ID: CV 0494 B SAMPLE COLLECTION TIME: 1130 | SAMPLE ID: CVO494B-CS |
| STATION ID: | |
| STATION ID: CY0494B SAMPLE COLLECTION TIME: 130 Description of sample location (front, back, side yard; vard Collection: Composito or Grab | vegetable garden; play set; ditch, etc): MS/MSD? Y or N |
| STATION ID: | MS/MSD? Y or Noticate/split sample station ID: |
| STATION ID: | MS/MSD? Y or N Logged? Y or N |
| STATION ID: | MS/MSD? Y or Noticate/split sample station ID: |
| STATION ID: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80198646 W |
| STATION ID: CY0494 B SAMPLE COLLECTION TIME: 130 Description of sample location (front, back, side yard; yard) Collection: Composito or Grab Field Duplicate or Split: Yes or No If yes, indicate Duplicate of Split: Trimble 1 Instrument #: Aliquot #1: Latitude: 33.56647556 | MS/MSD? Y or N Logged? Y or N |
| STATION ID: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80198646 W N Longitude 86.80193203 W |
| STATION ID: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80198646 W N Longitude 86.80193203 W N Longitude 86.8018967783 W |
| SAMPLE COLLECTION TIME: 130 Description of sample location (front, back, side yard; yard) Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Duplicate or Split: Trimble of Instrument #: Aliquot #1: Latitude: 33.56047556 Media description: Aliquot #2 Latitude: 33.56051769 Media description: Aliquot #3: Latitude: 33.56054977 155 Media description: 3780 | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80198646 W N Longitude 86.80193203 W N Longitude 86.8018967783 W 1 N Longitude 99666 |
| STATION ID: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80198646 W N Longitude 86.80193203 W N Longitude 86.8018967783 W |
| STATION ID: | MS/MSD? Y or N |
| STATION ID: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80198646 W N Longitude 86.80193203 W N Longitude 86.8018967783 W 1 N Longitude 99666 |

| ADDRESS: _(b) (6) DATE:W_08/12_ Other pertinent information (weather conditions, etc. | PROPERTY ID: CV0495 ARRIVAL TIME: 6923 PS 1055 |
|--|---|
| PROPERTY COMMENTS: | |
| | |
| | |
| Grid for property sketch 2 1 2 2 1 House on property 31 17.5 2 31 27.5 2 40 24 House 3 1 27.5 2 (b) (6) Front > Point 3 to building is 3 to 5 is 39' Back > Point 4 to Red House 1 2 to 1 is 18.5' | 27.5' |

| STATION ID: CV0495A SAMPLE ID: CV0495A - CS |
|---|
| SAMPLE COLLECTION TIME: 1020 |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): |
| Collection: Composite or Grab MS/MSD? Y or N |
| Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: |
| GPS Coordinates: Trimble Instrument #: 020168 Logged? To or N |
| Aliquot #1: Latitude: 33°333 33.56039850 N Longitude 86.80251301 W |
| Media description: |
| Aliquot #2 Latitude: 33.56050703 N Longitude 86.80253304 W |
| Media description: |
| Aliquot #3: Latitude: 33.56656946 N Longitude 86.80256779 W |
| Media description: |
| Aliquot #4: Latitude: 33.56056513 N Longitude 86.80249340 W |
| Media description: |
| Aliquot #5: Latitude: 33,56041834 N Longitude 86.80246497 W |
| Media description: |
| |
| SAMPLE COLLECTION TIME: 1045 Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): |
| SAMPLE COLLECTION TIME: 1045 Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or |
| SAMPLE COLLECTION TIME: 1045 Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: GPS Coordinates: Trimble Instrument #: 020167 Logged? For N |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: GPS Coordinates: Trimble Instrument #: |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Solid Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: GPS Coordinates: Trimble N Instrument #: D20167 Logged? Nor N Aliquot #1: Latitude: 33.56046312 N Longitude 86.80233018 W Media description: |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: GPS Coordinates: Trimble M Instrument #: D20168 Logged? Nor N Aliquot #1: Latitude: 33.56046312 N Longitude 86.80233018 W Media description: Aliquot #2 Latitude: 33.56048073 N Longitude 86.80227070 W |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Field Duplicate or Split: Yes or Instrument #: D20167 Logged? or N Aliquot #1: Latitude: 33.56048073 N Longitude 86.80233018 W Media description: Aliquot #3: Latitude: 33.56051733 N Longitude 86.80227970 W Media description: Aliquot #3: Latitude: 33.56051733 N Longitude 86.80227942 W Media description: |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Molicate Duplicate/split sample station ID: GPS Coordinates: Trimble Instrument #: 020167 Logged? Nor N Aliquot #1: Latitude: 33.56048073 N Longitude 86.80233018 W Media description: Aliquot #3: Latitude: 33.56051733 N Longitude 86.80227070 W Media description: Aliquot #3: Latitude: 33.56051733 N Longitude 86.80227942 W |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or P Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: GPS Coordinates: Trimble No Instrument #: |
| Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Back yard Collection: Composite or Grab MS/MSD? Y or Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID: GPS Coordinates: Trimble Instrument #: D20/68 Logged? For N Aliquot #1: Latitude: 33.56046312 N Longitude 86.80233018 W Media description: Aliquot #2 Latitude: 33.56048073 N Longitude 86.80227070 W Media description: Aliquot #3: Latitude: 33.56055826 N Longitude 86.80222942 W Media description: Aliquot #4: Latitude: 33.56055826 N Longitude 86.80220169 W |

| ADDRESS: _(b) (6) | PROPERTY ID: CVO 217 |
|--|-----------------------|
| DATE: 11/08/12 ARR | IVAL TIME: 1240 |
| Other pertinent information (weather conditions, etc.): | |
| PROPERTY COMMENTS: | |
| Chanks on coal mixed in | the Soil. |
| | |
| | |
| | |
| Grid for property sketch | 5 |
| Back 3 | |
| | |
| b) (6) 2 • OataRam • Data | 2 |
| 3 Rs Green House | |
| 1. 3. | • H |
| Front | • 5 |
| | |
| (b) (6) | |
| Distances Front > Point #4 to 5 is 3 to 5 is 2 to 3 | 15 21' 21 Home 10005C |
| 2 to 2 | 15 6 |
| Back → Point #2 to 5 is 5 2 to 5 is 5 3 to 5 is 1 4 to 5 is | 34' |

| STATION ID: CV8217A | SAMPLE ID: CV0217A-C8 |
|--|---|
| SAMPLE COLLECTION TIME: 1300 | |
| Description of sample location (front, back, side yard; | vegetable garden; play set; ditch, etc): |
| Collection: Composite or Grab | MS/MSD? Y or N |
| Field Duplicate or Split: Yes or If yes, indicate Dupl | icate/split sample station ID: |
| GPS Coordinates: Trimble [Instrument #: | Logged? Or N |
| Aliquot #1: Latitude: 33. 555 28856 125 | N Longitude 86.80154095 W |
| Media description: 39984 | |
| Aliquot #2 Latitude: 33.55540186 | N Longitude 86.80159015 W |
| Media description: | |
| Aliquot #3: Latitude: 33.55534475 | N Longitude 86.80156917 W |
| Media description: | |
| Aliquot #4: Latitude: 33. 55529173 | N Longitude 86.80154854 W |
| Media description: | |
| Aliquot #5: Latitude: 33.55528866 | N Longitude 86. 80159065 W |
| Media description: | |
| | |
| | |
| STATION ID: CV0217B | SAMPLE ID: CV0217B-CS |
| SAMPLE COLLECTION TIME: 1315 | SAMPLE ID: CV0217B-CS |
| | |
| SAMPLE COLLECTION TIME: 1315 Description of sample location (front, back, side yard; | |
| SAMPLE COLLECTION TIME: 1315 Description of sample location (front, back, side yard; yard) | vegetable garden; play set; ditch, etc): MS/MSD? Y or N |
| SAMPLE COLLECTION TIME: 1315 Description of sample location (front, back, side yard; grade) Collection: Composite or Grab | vegetable garden; play set; ditch, etc): MS/MSD? Y or N |
| SAMPLE COLLECTION TIME: 1315 Description of sample location (front, back, side yard; yard) Collection: composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupli | MS/MSD? Y or N icate/split sample station ID: |
| Description of sample location (front, back, side yard; where the sample location (front, back, side yard; w | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N |
| Description of sample location (front, back, side yard; where the sample location (front, back, side yard; w | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N |
| Description of sample location (front, back, side yard; Back 4900) Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupl GPS Coordinates: Trimble Instrument #: Aliquot #1: Latitude: 33.55538402 Media description: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80134480 W N Longitude 86.80133053 W |
| Description of sample location (front, back, side yard; yack yack yack) Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupl GPS Coordinates: Trimble Instrument #: Aliquot #1: Latitude: 33.55538402 Media description: Aliquot #2 Latitude: 33.55528516 | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80134480 W |
| Description of sample location (front, back, side yard; was a composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupl GPS Coordinates: Trimble Instrument #: Aliquot #1: Latitude: 33.55538402 Media description: Aliquot #2 Latitude: 33.55528516 Media description: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80134480 W N Longitude 86.80133053 W |
| Description of sample location (front, back, side yard; sample location) Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupl GPS Coordinates: Trimble Instrument #: Aliquot #1: Latitude: 33.55538402 Media description: Aliquot #2 Latitude: 33.555328516 Media description: Aliquot #3: Latitude: 33.55532817 | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80134480 W N Longitude 86.80133053 W |
| Description of sample location (front, back, side yard; yard) Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupl GPS Coordinates: Trimble Instrument #: Aliquot #1: Latitude: 33.55538402 Media description: Aliquot #2 Latitude: 33.555389516 Media description: Aliquot #3: Latitude: 33.55532817 Media description: | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80134480 N Longitude 86.80125604 N Longitude 86.80125604 N Longitude 86.80125604 W N Longitude 86.80125604 W N Longitude 86.80114771 W |
| SAMPLE COLLECTION TIME: 1315 Description of sample location (front, back, side yard; yard) Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dupl GPS Coordinates: Trimble Instrument #: Aliquot #1: Latitude: 33.55538402 Media description: Aliquot #2 Latitude: 33.55538516 Media description: Aliquot #3: Latitude: 33.55538680 | MS/MSD? Y or N icate/split sample station ID: Logged? Y or N N Longitude 86.80134480 W N Longitude 86.80125684 W N Longitude 86.80125684 |

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